In the Claims:

Claims 34, 36-44, 46, 47 and 49 are currently under examination. Claims 1-33 and 35, 45 and 48 were canceled.

Claims 1-33. (Canceled)

Claim 34. (Currently Amended) A transgenic mouse comprising an isolated DNAc molecule, wherein said DNAc molecule comprises a promoter P and an L1 cassette sequence comprising a core L1 retrotransposon element, further wherein said isolated DNAc molecule integrates into the genome of said mouse.

Claim 35. (Canceled)

Claim 36. (Previously Presented) The transgenic mouse of claim 34, wherein said core L1 retrotransposon element comprises a 5' UTR, ORF1, ORF2 comprising EN and RT domains, a 3' UTR, a poly A signal, and a vector sequence comprising at least one origin of DNA replication and a DNA sequence encoding at least one selectable marker protein.

Claim 37. (Previously Presented) The transgenic mouse of claim 34, wherein said promoter P is an RNA pol III promoter or an RNA pol II promoter, said RNA pol II promoter being selected from the group consisting of a constitutive promoter, an inducible promoter, a tissue-specific promoter and a viral promoter.

Claim 38. (Previously Presented) The transgenic mouse of claim 36, wherein said origin of DNA replication is a eukaryotic origin of DNA replication.

Claim 39. (Previously Presented) The transgenic mouse of claim 38, wherein said isolated DNAc molecule further comprises a prokaryotic origin of DNA replication.

Claim 40. The transgenic mouse of claim 36, wherein said selectable marker protein is a first marker protein selected from the group consisting of a neomycin resistance

protein, green fluorescent protein, β-galactosidase, and a prokaryotic antibiotic resistance protein.

Claim 41. (Previously Presented) The transgenic mouse of claim 36, wherein said isolated DNAc molecule further comprises a fragment of non-L1 DNA and a promoter P' for expression of said non-L1 DNA, wherein said non-L1 DNA and promoter P' are positioned within said 3' UTR of between said 3' UTR and said poly A signal.

Claim 42. (Previously Presented) The transgenic mouse of claim 41, wherein said non-L1 DNA comprises DNA encoding a second marker protein.

Claim 43. (Previously Presented) The transgenic mouse of claim 42, wherein said second marker protein is selected from the group consisting of neomycin resistance protein, green fluorescent protein, β-galactosidase, herpes simplex virus thymidine kinase, and a eukaryotic cell surface protein.

Claim 44. (Previously Presented) A sperm cell obtained from a male transgenic mouse, wherein said mouse comprises an isolated DNAc molecule, wherein said DNAc molecule comprises a promoter P and an L1 cassette sequence comprising a core L1 retrotransposon element.

Claim 45. (Canceled).

Claim 46. (Previously Presented) A transgenic mouse obtained by fertilization of an egg with the sperm of claim 44, wherein said egg is obtained from a female of the same species as said transgenic mouse from which said sperm is obtained.

Claim 47. (Previously Presented) A sperm cell obtained from a male transgenic mouse, wherein said mouse comprises an isolated DNAc molecule, wherein said DNAc molecule comprises a promoter P and an L1 cassette sequence comprising a core L1 retrotransposon element, wherein said core L1 retrotransposon element comprises a 5' UTR,

ORF1, ORF2 comprising EN and RT domains, a 3' UTR, a poly A signal, and a vector sequence comprising at least one origin of DNA replication and a DNA sequence encoding at least one selectable marker protein.

Claim 48. (Canceled).

Claim 49. (Previously Presented) A transgenic mouse obtained by fertilization of an egg with the sperm cell of claim 47, wherein said egg is obtained from a female of the same species as said transgenic mouse from which said sperm is obtained.